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| EXAMINER | |
|---|---|
| SHANG, ANNAN Q | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2424 | |

| NOTIFICATION DATE | DELIVERY MODE |
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| 07/24/2009 | ELECTRONIC |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 09/960,351 | LINDBERG, ANDERS | |
| | Examiner | Art Unit | |
| | ANNAN Q. SHANG | 2424 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *31 March 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-37* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-37* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments filed 03/31/09 have been fully considered but they are not persuasive.

As to claims 1-37, rejected under 103(a) as being unpatentable over **Jensen et al (5,671,219),** Applicant argues that Jensen do not teach the claims limitation (see page 2+ of Applicant's Remarks).

In response, Examiner notes Applicant's arguments, however, the Examiner disagrees. Jensen discloses a receiver which monitors packets of information within a transmission channel or frequency and retrieves portions of data within the channel being received or other available channel (channels stored in advance) upon interruption due to various natural interruption: **low signal quality, severe signal blockage when turning corner quickly or dense urban high rise, etc.,…as a result of poor data flow, error in the data, etc.)** of the current channel in-progress **Jensen further discloses one way broadcast system or point-to-multipoint application (col.8, lines 53-60).** Jensen further teaches other seamless undetectable handoffs between stations (col.12, line 39-col.13, line 22, line 67-col.14, line 6, line 54-col.15, line 38, line 47-col.16, line 18, col.17, line 37-col.18, 43 and col.19, line 55-col.20, line 1+). **Monitoring packets of information (cluster) being received within a set interval, and switching to one of previously stored channels, if the overall link quality drops below a measurement threshold, meets the limitation of** "…a cluster of specific user terminating information…indication of the end of he cluster....of specific

user terminating information." Furthermore the probability of having a loss of signal (**continuous flow of data within channel or frequency being received**) was anticipated thereby leading to the creation of a priority list, for providing a solution in the event of a signal loss. In addition, the probability of having a signal loss is based on a predetermined threshold of amount of signal within a period. Jensen is silent where the flow of information of a unidirectional digital broadcasting transmission. However, Jensen further suggests that the invention can be implemented on cable TV network and variety of different networks, including broadcast networks or point-multipoint applications depending upon the desired application (col.4, line 43-col.5, line 6, col.8, lines 46-61 and col.14, lines 30-52). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Jensen to include broadcast networks or point-to-multipoint applications, such as DVB, DAB, etc., to provide additional service(s) to users. Hence Applicant's arguments are not persuasive. The 103(a) rejection using Jensen is proper, meet all the claims limitations as discussed below. **This office action is made final.**

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Jensen et al (5,671,219)**.

As to claim 1, **Jensen** a method in which user stations (102) communicate with one or more base stations (104) to place and receive calls and data, in a secure voice or data link and ability to handoff calls between stations while such calls are in progress and further discloses a method of test receiving alternative reception frequencies in a receiver receiving a continuous flow of information at a first reception frequency, the continuous flow of information including a user terminating information transmitted in clusters, the receiver including an information transfer routine that extracts a flow of specific user terminating information from the received continuous flow of information, the method comprising:

The claimed "an antenna and a demodulator…" are inherent to Receiver of Mobile Station 'MS'102 (figs.1-4 and col.3, lines 31-42, col.6, lines 11-55);

Predicting (MS-102) an interruption in the form of natural break in the transmitted flow of specific user terminating information, based on an indication of the end of a cluster of the specific user termination information, where the indication of the end of the cluster of specific user terminating information is part of the specific user terminating information (col.12, line 39-col.13, line 22, line 67-col.14, line 6); base on the behavior of the specific user terminating information, evaluating the interruption to determines a probability whether it will be of an adequate length of time, and generating a positive response if it is evaluated that the interruption will be of an adequate length of time (col.14, line 54-col.15, line 38, line 47-col.16, line 18 and col.18, line 1-43);

Changing reception frequency of the receiver from the first reception frequency to an alternative reception frequency if the evaluation has generate a positive response; Test receiving the alternative reception frequency; enabling reception and extraction of the flow of specific user terminating information (col.14, line 54-col.15, line 38, line 47-col.16, line 18 and col.18, line 1-43), note that due to expected interruption of the flow of information to MS-102 during communication with a base station, MS-102 stores in advance available frequencies of all base stations within the vicinity, and when such interruption occurs during communication, such as, faulty communication, in situation where sudden shadowing occurs, such as when connection with current base station is lost due to severe signal blockage near the limit of cell range such as can occur when turning corner quickly in a dense urban high rise area, low signal strength, etc., MS-102 checks its previously created 'priority list' of available base stations in the vicinity and attempts to establish contact with new base station (handoff or handover) or previous base station during this period. Jensen further teaches monitoring packets of information being received, within a set interval, and if the overall link quality drops below a measurement threshold, the receiver switches to one of previously stored frequencies (col.15, lines 13-25, line 47-col.16, line 18, col.17, line 37-col.18, 43 and col.19, line 55-col.20, line 1+). By monitoring packets of information within a set interval, Jensen meets the limitation of a cluster of specific user terminating information as to where the packet of the flow of specific user terminating information is based.

Jensen is silent where the flow of information of a unidirectional digital broadcasting transmission.

However, Jensen further suggests that the invention can be implemented on cable TV network and variety of different networks, including broadcast networks or point-multipoint applications depending upon the desired application (col.4, line 43-col.5, line 6, col.8, lines 46-61 and col.14, lines 30-52).

Hence it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Jensen to include broadcast networks or point-to-multipoint applications, such as DVB, DAB, etc., to provide additional service(s) to users.

Claims 2-3 are met as previously discussed with respect to claim 1.

As to claims 4-5, Jensen further discloses where the interruption comprises the steps of: determining a probability that the interruption will be of an adequate length of time, determining if the probability is larger than a predetermined threshold value and if is determined that the probability is larger than the predetermined threshold value then it is evaluated that the interruption will be of an adequate length of time, where an adequate length of time of an interruption is at least equal to a total time of one test reception and one frequency (col.14, line 54-col.15, line 38, line 47-col.16, line 18 and col.18, line 1-43), note that the probability of having a loss of signal was anticipated thereby leading to the creation of a priority list, for providing a solution in the event of a signal loss. Furthermore, the probability of having a signal loss is based on a predetermined threshold of amount of signal within a period.

Claims 6-9 are met as previously discussed with respect to claim 1.

Claim 10 is met as previously discussed with respect to claim 1.

Claim 11 is met as previously discussed with respect to claim 1.

Claim 12 is met as previously discussed with respect to claim 1.

As to claims 13-14, Jensen further discloses where enabling reception and extraction of the flow of specific user terminating information (SUTI) is performed after a predetermined time after the information transfer routine has requested more information (col.14, line 54-col.15, line 38, line 47-col.16, line 18 and col.18, line 1-43).

As to claims 15-16, Jensen further discloses where enabling reception and extraction of the flow of SUTI is performed after the information transfer routine is activated and after a predetermined period of time (col.14, line 54-col.15, line 38, line 47-col.16, line 18 and col.18, line 1-43).

As to claims 17-23, Jensen further discloses determining a list of alternative frequencies, the claimed "changing reception frequency…." "test receiving the further alternative frequency (col.14, line 54-col.15, line 38, line 47-col.16, line 18 and col.18, line 1-43), evaluating the test reception or test receptions based on one or more parameters of the test received alternative frequency or frequencies, where enabling reception and extraction of the flow of USTI comprises changing the reception frequency to the first reception frequency and initiating a handover to an alternative frequency (col.14, line 54-col.15, line 38, line 47-col.16, line 18 and col.18, line 1-43).

As to claims 24-29, the claimed limitations are met as previously discussed with respect to claim 1.

As to claim 30, the claimed "a receiver being arranged to receiving a continuous flow of information…" is composed of the same structural elements that were discussed in the rejection of claim 1.

Claims 31-32 are met as previously discussed with respect to claims 2-3.

As to claims 33, Jensen further discloses continuously evaluating and determining the best frequency within a predetermined time during the handoff (col.14, line 54-col.15, line 38, line 47-col.16, line 18 and col.18, line 1-43).

Claims 34-37 are met as previously discussed with respect to claims 17-23.

## *Conclusion*

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Annan Q. Shang** whose telephone number is **571-272-7355**. The examiner can normally be reached on **700am-400pm**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Christopher S. Kelley** can be reached on **571-272-7331**. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300.**

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the **Electronic Business Center (EBC) at 866-217-9197 (toll-free)**. If you would like assistance from a **USPTO Customer Service Representative** or access to the automated information system, **call 800-786-9199 (IN USA OR CANADA) or 571-272-1000**.

/Annan Q Shang/
Examiner, Art Unit 2424

**Annan Q. Shang**